

CLAIMS

What is claimed is:

1. A scanner comprising:
 - a platen; and
 - an optical head, the optical head displaced from the platen by a distance that is variable.
2. The scanner of claim 1, further comprising:
 - piezoelectric elements at least partly positioned between the platen and the optical head, where the distance between the platen and the optical head is determined by a voltage across the piezoelectric elements.
3. The scanner of claim 1, further comprising:
 - pads positioned between the optical head and the platen, the pads pivoting around a pivot point, where for a first direction of travel of the optical head the pads pivot to a first position, and for a second direction of travel of the optical head the pads pivot to a second position, and where the distance between the platen and the optical head is different for the first and second positions of the pads.
4. A scanner comprising:
 - a platen;
 - an optical head; and
 - pads positioned between the optical head and the platen, where the optical head pivots around at least some of the pads.

5. A scanner comprising:

a platen;
a photosensor array; and
the photosensor array displaced from the platen by a distance that is
variable.

6. The scanner of claim 5, further comprising:

an optical head, the photosensor array within the optical head; and
piezoelectric elements positioned between the optical head and the platen,
where the distance between the platen and the photosensor array is
determined by a voltage across the piezoelectric elements.

7. The scanner of claim 5, further comprising:

an optical head, the photosensor array within the optical head; and
pads positioned between the optical head and the platen, where the optical
head pivots around at least some of the pads.

8. The scanner of claim 5, further comprising:

an optical head, the photosensor array within the optical head; and
pads positioned between the optical head and the platen, the pads pivoting
around a pivot point, where for a first direction of travel of the optical head
the pads pivot to a first position, and for a second direction of travel of the
optical head the pads pivot to a second position, and where the distance
between the platen and the photosensor array is different for the first and
second positions of the pads.

9. A method of scanning, comprising:
adjusting a distance of an optical head relative to a platen; and
translating the optical head.
10. The method of claim 9, the step of adjusting further comprising:
adjusting a voltage across a piezoelectric element that is at least partially
positioned between the optical head and the platen.
11. The method of claim 9, further comprising:
pivoting a pad, between the optical head and the platen, as a result of
translating the optical head, where the distance between the optical head and
the platen is a function of a direction of pivoting of the pad.
12. A method of scanning comprising;
translating an optical head; and
pivoting the optical head around a pad, the pad between the optical head and
a platen, where a direction of pivoting is dependent on a direction of
translating, and where the distance between the optical head and the platen is
a function of the direction of pivoting of the optical head.
13. A method of scanning, comprising:
adjusting a distance of a photosensor array relative to a platen; and
translating the photosensor array.
14. The method of claim 13, the step of adjusting further comprising:
adjusting a voltage across a piezoelectric element that is at least partially
positioned between an optical head and the platen, where the photosensor
array is within the optical head.

15. The method of claim 13, further comprising:

translating an optical head, where the photosensor array is within the optical head; and

pivoting the optical head around a pad, the pad between the optical head and the platen, where a direction of pivoting is dependent on a direction of translating, and where the distance between the photosensor array and the platen is a function of the direction of pivoting of the optical head.

16. The method of claim 13, further comprising:

translating an optical head, where the photosensor array is within the optical head; and

pivoting a pad, between the optical head and the platen, as a result of translating the optical head, where the distance between the photosensor array and the platen is a function of a direction of pivoting of the pad.

17. A scanner comprising:

a photosensor array;

a platen; and

means for changing a distance of the photosensor array relative to a surface of the platen.